DOCUMENT RESUME

ED 376 009 RC 019 849

AUTHOR Hamilton, Lawrence C.; Seyfrit, Carole L.
TITLE Female Flight? Gender Balance and Outmigration by Native Alaskan Villagers.
SPONS AGENCY National Science Foundation, Washington, D.C.
PUB DATE 22 Jun 93
CONTRACT DPP-9111675
NOTE 12p.; Paper presented at the International Congress on Circumpolar Health (9th, Reykjavik, Iceland, June 1993). Some figures may not reproduce clearly.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Alaska Natives; *Aspiration; Educational Attitudes; Eskimos; Higher Education; High School Graduates; High Schools; *High School Students; *Rural to Urban Migration; *Sex Differences; *Student Attitudes; Young Adults
IDENTIFIERS *Alaska

ABSTRACT

Surveys in Alaska's predominantly Native, Bristol Bay and Northwest Arctic regions examined attitudes toward education and migration among high school students, as well as outcomes among high school graduates. These surveys encompassed 430 high school students and 144 recent high school graduates in 15 predominantly Native villages. About 63 percent of students said they expected to leave their present region, with girls more likely than boys to expect permanent outmigration. Girls were also significantly more ambitious than boys with regard to higher education. Among the graduates surveyed, women were more likely than men to have attended university, to have a full-time job, and to be living outside their home region. Statewide 1990 Census data confirm a significant relation between percent female and community population, consistent with the hypothesis that "female flight" from Native villages is shifting the young adult gender balance. Bush villages tend to have more young Native men than women, whereas larger cities have more young Native women than men. Such imbalances must directly affect opportunities for marriage, family, and cultural continuity. They could also have wide-ranging indirect consequences, including exacerbation of village social and health problems associated with unmarried young men. (Author/SV)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED 376 009

# FEMALE FLIGHT?

# GENDER BALANCE AND OUTMIGRATION BY NATIVE ALASKAN VILLAGERS

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Carole L. Seyfrit
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Lawrence C. Hamilton
University of New Hampshire
Durham NH 03824 U.S.A.
e-mail: L_HAMILTON@UNHH.UNH.EDU

Carole L. Seyfrit
Old Dominion University
Norfolk VA 23529 U.S.A.
e-mail: CLS100F@ODUVM.CC.ODU.EDU

## ABSTRACT

Recent surveys in Alaska's predominantly Native Bristol Bay and Northwest Arctic regions find that female high school students, more often than males, expect to migrate permanently away from their home community and region. Reports from high school graduates indicate that more young women do move away after graduation, and that women more often attend college or hold full-time jobs. Statewide 1990 Census data confirm a significant relation between percent female and community population, consistent with the hypothesis that "female flight" from Native villages is shifting the young adult gender balance. Bush villages tend to have more young Native men than women, whereas larger cities have more young Native women than men. Such imbalances must directly affect opportunities for marriage, family, and cultural continuity. They could also have wide-ranging indirect consequences, including exacerbation of village social and health problems associated with unmarried young men.

Paper presented at the *IX International Congress on Circumpolar Health*, Reykjavik, Iceland, June 22 1993.

Research supported by a grant from the National Science Foundation (DPP-9111675).

RC 019849



BEST COPY AVAILABLE

## INTRODUCTION

Over the past several years we have been conducting research among high school students in Alaska's Bristol Bay and Northwest Arctic regions (predominantly Yup'ik and Inupiat Eskimo, respectively). Our initial interest focused on the ways in which rapid resource development, such as the Northwest Arctic's Red Dog Mine, affects the aspirations and attitudes of rural Alaskan adolescents (1). In spring 1992 we surveyed about two-thirds of the high school students in both regions, as well as a majority of Bristol Bay region high school graduates from 1987-1991. We subsequently returned to discuss the survey results with educators and students in fifteen towns and villages.

On our travels through Native villages we sometimes heard accounts of young women moving away for jobs, education, or marriage, leaving the village with a problematic excess of young men. Other authors recount similar stories from elsewhere in Alaska (2,3) and from such distant lands as Greenland and Siberia (4,5). With these reports in mind, we began searching for hard evidence of any disproportionate outmigration by young Native women. In both our student survey results and U.S. Census data, we found indications that the phenomenon of "female flight" might be fairly common within the two regions we studied (6).

This paper begins by briefly reviewing Alaskan Native and non-Native demography. Next we present three lines of evidence relevant to female flight. Our Bristol Bay/Northwest Arctic surveys reveal consistent gender differences in high school students' aspirations. Gender differences also appear in a survey of recent Bristol Bay graduates. Finally we turn to statewide Census data, and describe the correlation between Native gender imbalance and community size.

## ALASKAN DEMOGRAPHY

About 86 000 of Alaska's 550 000 people (as of 1990) are Native Americans. Natives constitute a small minority in cities, but they form the majority in bush (rural) villages. Figure 1 breaks down Alaska's ethnic composition for places village (below 1000 people), town (1000 - 9999) and city (10 000 or more) size (7).

Young adults (25 to 45 years old) are the most abundant age group among Alaska's white population. These young adults include many men who moved to Alaska for job or lifestyle reasons. White males outnumber white females in every age group below about 65 (Figure 2).

The age-sex distribution for Alaskan Natives, on the other hand, follows a different pattern (Figure 3). Infants are the largest single age group in this fast-growing population, which is much less affected by migration from out of state. Unlike whites, Natives exhibit no statewide gender imbalance (until old age, when for both groups female longevity becomes a factor).

The Native gender balance seen in Figure 3 does not necessarily prove no female flight occurs from Alaska itself. Young Native men have exceptionally high mortality rates (8), and for that reason alone we might expect to see more young Native women than men--but in fact statewide there are slightly fewer. The effects of differential mortality and out-of-state migration are worthy topics for further research, though beyond our scope here.

## HIGH SCHOOL STUDENTS SURVEY

In spring 1992 we organized surveys encompassing over two-thirds ($n$ = 430) of the high school students in fifteen predominantly Native communities of Alaska's Northwest Arctic and Bristol Bay regions (1,6). One question asked where students thought they would spend most of the rest of their lives. About 63% said they expected to leave their present region, a much higher proportion than one might guess from the modest numbers of recent graduates known to have actually established themselves elsewhere.

We found persistent gender differences in migration expectations: more girls than boys said they would likely move away. Figure 4 tracks this gender difference across four subsamples: Bristol Bay region villages (Aleknagik, Manokotak, New Stuyahok, and Togiak), the Bristol Bay region's hub town (Dillingham), Northwest Arctic villages (Ambler, Buckland, Deering, Kiana, Kivalina, Noatak, Noorvik, Selawik, and Shungnak), and the Northwest Arctic's hub town (Kotzebue).

Gender differences also arose when we asked about university aspirations: girls were significantly more ambitious than boys regarding higher education. In conversations with small groups of students, we heard repeatedly that school was a "girl type of thing," in which females performed better because they work harder or are smarter or care less for alternative pursuits like hunting and basketball. Gender differences in ambitions translate into differences in outcomes: University of Alaska studies document the growing preponderance of women among Native college students (9,10). Both the anti-school attitudes of boys, and girls' willingness to adapt, might carry over to white-collar employment in general--opening a wide gap between the opportunities boys and girls perceive.

## HIGH SCHOOL GRADUATES SURVEY

In addition to surveying high school students, we attempted the more difficult task of surveying recent high school graduates in both regions. Six local interviewers (Inupiat in the Northwest Arctic, and Yup'ik in Bristol Bay) were hired and trained for this work. Our Northwest Arctic completion rate was low, but Bristol Bay interviewers succeeded in contacting 54% ($n$ = 144) of the people who had graduated from area high schools over the past five years (1987-1991). Although 54% is still

not high enough to insure a representative sample, our graduate survey results fit well between high school and Census data.

Among Bristol Bay graduates, women were somewhat more likely to have attended a university after graduating from high school (Table 1). They were also significantly more likely to have a full-time job, and more than twice as likely to be living outside the Bristol Bay region at the time of the survey. Despite (or perhaps because of) these tangible steps towards acculturation, the women also assigned greater importance to retaining their Native language and culture.

In broad terms these results concur with the gender difference seen earlier regarding students' expectations: females more often plan to leave, and do leave. In another respect, however, Table 1 contrasts with Figure 4. Percentages of students who think they will leave (Figure 4) appear much higher than percentages of graduates who actually left (Table 1). For a young man or woman raised in rural Alaska, establishing a successful urban life presents big challenges in an unfamiliar world. Many try but come back.

In retrospect, graduates often wish they had taken different courses in high school. Table 2 lists types of courses they mentioned most often in response to our open-ended question. To bush teachers and students, the most surprising result here may be the widespread wish for more hard math, science, and academically demanding courses in general. The tone of respondents' comments indicated that many viewed their rural high schools as too easy, leaving them inadequately prepared to complete college or compete for desirable jobs.

Two significant gender differences stand out in Table 2. Men more often than women wish they had taken shop classes, particularly for skills like boat building and small engine repair. Women, on the other hand, wish for business skills like typing, accounting, and computer applications. These preferences more or less follow traditional sex roles, of course, but note that they lead in different directions. Shop-class skills like small engine repair help out in the bush, but won't lead many boys to full-time jobs. Entry-level business skills, on the other hand, have limited importance in the bush. Mainly they prepare girls for white-collar urban careers. As Kleinfeld (11) shows:

> Inupiat women have surged into the work force and have increasingly entered skilled work....Inupiat men, in contrast, have developed a culturally different pattern of economic activity...[they] are concentrated in intermittent blue-collar work [and] also participate substantially in the subsistence economy.

Fogel-Chance (12) analyzes the lives of a sample of North Slope women who moved to Anchorage in more detail.

## ANALYSIS OF THE 1990 CENSUS

If the outmigration of Native women from the bush were as substantial as survey results and anecdotal accounts suggest, it should have visible demographic consequences. To test this hypothesis we assembled data on the age-sex-race composition of every community in Alaska ($n$ = 352), using the 1990 Census. Figures 1-3 were drawn from these data.

Figure 5 displays boxplots of the percent female among 20-39 year old Natives in 158 Alaskan places, grouped according to total population. These 158 places are mostly discrete villages, towns, and cities, though they also include some rural areas with dispersed populations. The boxplots include all places in Alaska with 100 or more Native residents. Horizontal lines within each boxplot demark the median percent female for places of that size. Differences among these medians are statistically significant (Table 3). We emphasize medians and a nonparametric Kruskal-Wallis test here to work around potential outlier problems, but a conventional (or robust) analysis of variance will confirm that the means significantly differ as well.

Boxes in Figure 5 indicate each group's interquartile range, with outliers plotted individually (13). The left boxplot in Figure 5 shows that over three-quarters of these villages have more young Native men than women, with several villages more than 60% male in this age group. All but one of the larger places have more young Native women than men. Towns of 1000 to 9999 people occupy an intermediate position (6).

Figure 5 and Table 3 establish a significant relation between young adult Native gender balance and community size. Small villages tend to have significantly more young Native men than women; the reverse holds true in cities. The statewide gender balance seen earlier in Figure 3 results from averaging these opposite trends.

## DISCUSSION

In summary, males predominate among both white and Native populations in rural Alaska. But whereas the white male surplus largely reflects differential in-migration (male outsiders moving to the frontier), the pattern of Native gender imbalances in Figure 5 requires a different explanation. Female flight, the disproportionate outmigration of young Native women from bush villages, provides a plausible explanation that fits well with other lines of evidence including ethnographic accounts, survey data, and college enrollment statistics.

We are not talking about a massive exodus. A net migration of about 1000 women from villages to larger towns and cities could account for the entire contrast seen in Figure 5/Table 3. But 1000 women comprise roughly 7% of the state's total 20-39 year old Native female population. Furthermore we know that migration in general does not remove people randomly, but tends to select out more energetic individuals, so its qualitative effects on communities may exceed the quantitative

impact. And Figure 5 suggests that the quantitative impact alone could be substantial in many communities, though nonexistent in some others.

Before or after moving to cities, Native women have greater likelihood of meeting marriageable white men due to the statewide white gender imbalance. If Native women intermarry or leave, however, Native men face a shortage of marriageable women of any ethnicity. Resulting problems may include increasing pressures on younger girls (adding to *their* incentives to leave); extending the hazardous "adolescent" period of young male self-indulgence; reducing opportunities to settle down and form families; and erosion of functional culture. We are not ready to offer solutions to such daunting problems, nor yet claim that the magnitude of female flight has been clearly established. That will require more detailed tracking of births, mortality, and out-of-state migration, as well as direct migration data. Whatever its exact magnitude, female flight does appear to be a real phenomenon with potentially broad implications, deserving systematic attention from our disciplines.

## REFERENCES


1. Seyfrit CL, Hamilton LC. Social impacts of resource development on Arctic adolescents. *Arctic Research of the US* 1992; 6(Fall):57-61.

2. Kizzia T. *The Wake of the Unseen Object: Among the Native Cultures of Bush Alaska*. New York: Henry Holt, 1991.

3. Robert-Lamblin J. An historical and contemporary demography of Akutan, an Aleutian village. *Etudes/Inuit/Studies* 1982; 6(1):99-126.

4. Langaard P. Modernization and traditional interpersonal relations in a small Greenlandic community: A case study from southern Greenland. *Arctic Anthropology* 1986; 23(1–2):299–314.

5. Gail Fondahl, written communication.

6. Hamilton LC, Seyfrit CL. Town-village contrasts in Alaskan youth aspirations. *Arctic* 1993; 46(3).

7. Bureau of the Census. 1990 Census of Population and Housing Summary Tape File 1a, CD90-1a-9-1.

8. McNabb S. Native health status and native health policy: Current dilemmas at the federal level. *Arctic Anthropology* 1990; 27(1):20-35.

9. Kleinfeld J, Gorsuch L, Kerr J. *Minorities in higher education: The changing North.* Fairbanks: Institute of Social and Economic Research, 1986.

10. Kleinfeld J. *Alaska Native education: Issues in the nineties.* Anchorage: Henry M. Jackson Foundation, 1992.

11. Kleinfeld, J. "Different paths of Inupiat mena and women in the wage economy." *Alaska Review of Social and Economic Conditions* 1981; XVIII(1).

12. Fogel-Chance, N. "Living in both worlds: 'Modernity' and 'tradition' among North Slope Inupiat women in Anchorage." *Arctic Anthropology* 1993; 30(1).

13. Hamilton, LC. *Statistics with Stata 3.* Belmont, CA: Duxbury, 1993.

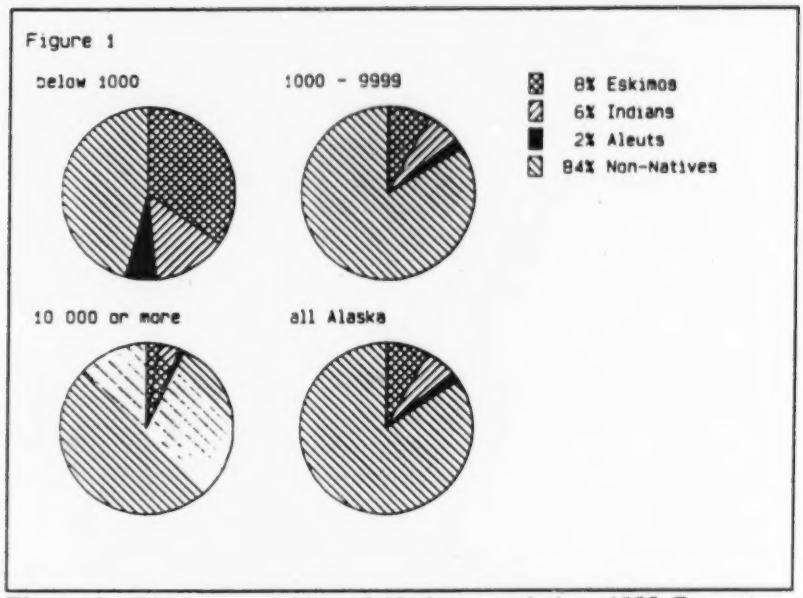


**Figure 1**: Ethnic composition of Alaskan population (1990 Census), broken down by community size: village (1 to 999 people), town (1,000 to 9,999), or city (10,000 or more).

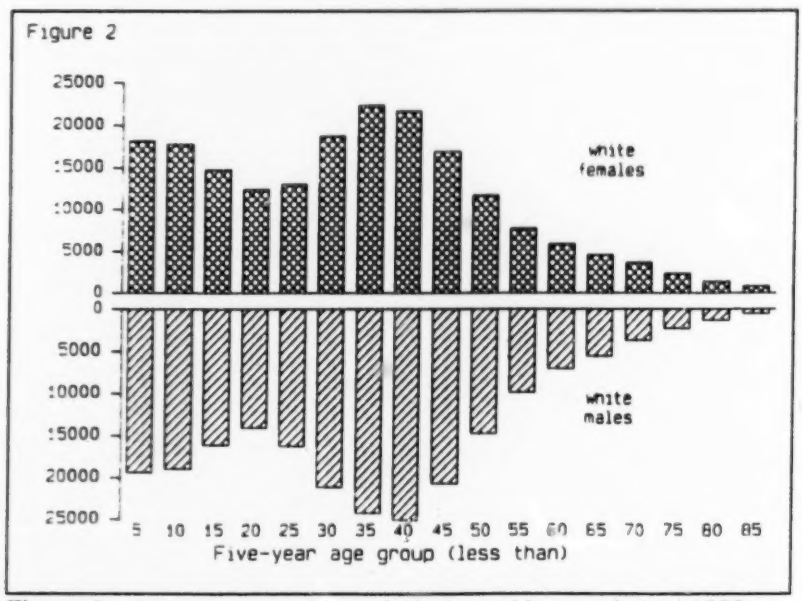


**Figure 2**: Age-sex composition of Alaskan white population, 1990 Census.

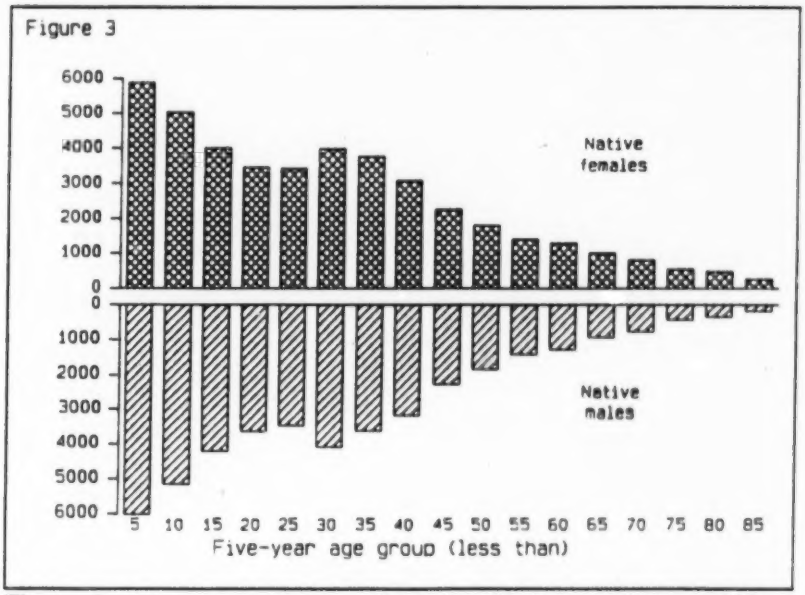


**Figure 3**: Age-sex composition of Alaskan Native population, 1990 Census.

**Table 1**: Gender Differences Among Bristol Bay High School Graduates (62 men, 69 women).

| | men | women | all | signif-icant? |
|---|---|---|---|---|
| Attended university | 26% | 30% | 28% | n.s. |
| Have full time job | 54% | 75% | 65% | $P < .05$ |
| Living outside region | 10% | 25% | 18% | $P < .05$ |
| Very important keep language | 76% | 93% | 85% | $P < .01$ |

Data source: fixed-choice questions on survey by authors conducted spring 1992.



BEST COPY AVAILABLE

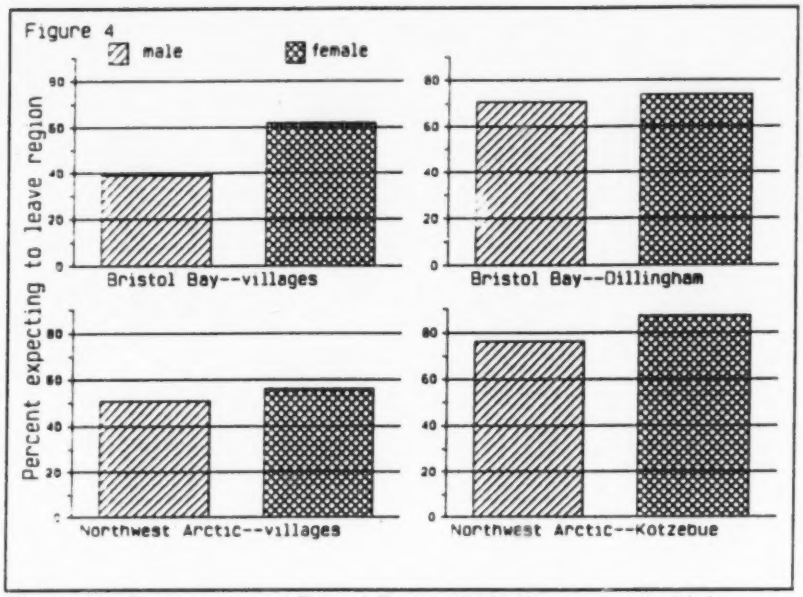


**Figure 4**: Percentages of Bristol Bay and Northwest Arctic high school students expecting to live most of the rest of their lives away from their home region.

**Table 2**: Courses Bristol Bay and Northwest Arctic Graduates Wish They Had Taken More of in High School (90 men, 109 women).

| | men | women | all | signif-icant? |
|---|---|---|---|---|
| Math--e.g. algebra, calculus, trigonometry, geometry | 19% | 26% | 23% | n.s. |
| Business--e.g. typing, accounting, computer applications | [illegible]% | 28% | 18% | $P < .001$ |
| Science--e.g. chemistry, physics | 14% | 12% | 13% | n.s. |
| More academic, college prep | 12% | 8% | 10% | n.s. |
| Shop--e.g. small engine repair | 11% | 1% | 6% | $P < .05$ |
| English, writing | 5% | 6% | 6% | n.s. |

Data source: open-ended question on survey by authors conducted spring 1992. No answer or more than one answer possible.

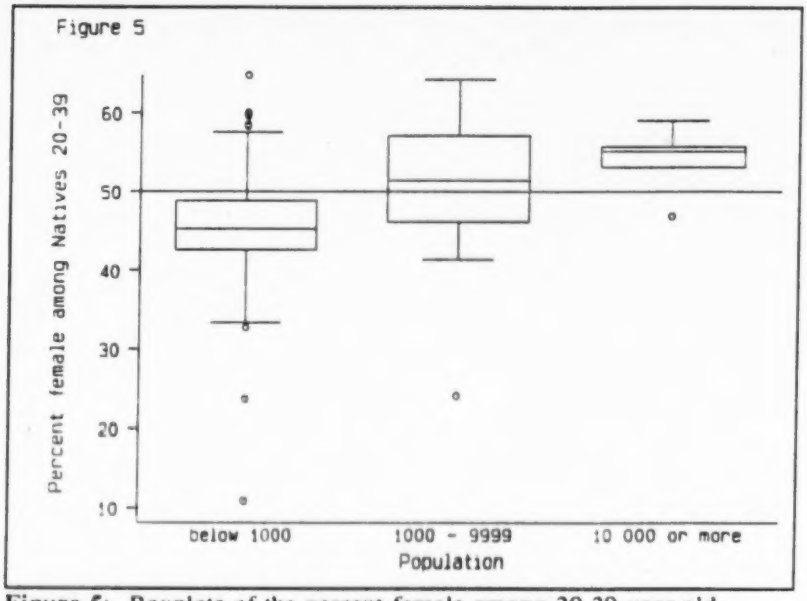


**Figure 5**: Boxplots of the percent female among 20-39 year old Natives in 158 Alaskan Census communities, by total population.

**Table 3**: Median Percent Female Among Alaskan Natives 20 to 39 Years Old.

| | median % female |
|---|---|
| 125 places with population < 1000 | 45.2% |
| 27 places with population 1000-9999 | 51.4% |
| 6 places with population >=10 000 | 55.2% |

Kruskal-Wallis test indicates medians significantly differ: $P = .0001$.

Data source: 1990 Census. All Alaskan places with 100 or more Natives included.



BEST COPY AVAILABLE